

ABSTRACT

A cell-based assay technique for identifying and evaluating chemical compounds and agents which affect the production of PTH-rP in mammalian cells and other cell types is set forth. Specifically, tumor cell lines are transformed with an expression vector comprising a DNA sequence encoding a promoter region of PTH-rP operatively linked to a reporter gene encoding an assayable product and cultured under conditions which permit expression of the assayable product. Chemical agents and factors can then be identified by their ability to modulate the expression of the reporter gene, thereby affecting the production of the assayable product. Such agents are then tested for inhibitory effects on tumor cell growth and for stimulatory effects on bone formation and repair.